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HARRINGTON & SMITH 4 RESEARCH DRIVE, Suite 202 SHELTON, CT 06484-6212			EXAMINER STONE, ROBERT M	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/576,536	Applicant(s) KARTTUNEN, JUHA	
	Examiner Robert M. Stone	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed on 4 January 2010 has been entered and considered by the examiner.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 18 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains new subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation "A computer program product comprising computer readable storage medium including a program stored thereon" is not described in the specification. There is no mention of "computer", "program", or "storage medium" in the specification. The only somewhat relevant term is "memory" which is only mentioned in the specification on Page 6 line 12 which fails to reference a computer storage medium nor does it perform any of the claimed functions. Further, Examiner notes "controller" (Page 11 line 33) but this does not appear to match the claimed functionality either.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. § 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO “Interim Examination Instructions for Evaluating Subject Matter Eligibility Under 35 U.S.C. § 101” (Official Gazette notice of 24 August 2009), reads as follows:

The United States Patent and Trademark Office (USPTO) is obliged to give claims their broadest reasonable interpretation consistent with the specification during proceedings before the USPTO. *See In re Zletz*, 893 F.2d 319 (Fed. Cir. 1989) (during patent examination the pending claims must be interpreted as broadly as their terms reasonably allow). The broadest reasonable interpretation of a claim drawn to a computer readable medium (also called machine readable medium and other such variations) typically covers forms of non-transitory tangible media and transitory propagating signals *per se* in view of the ordinary customary meaning of computer readable media, particularly when the specification is silent. *See* MPEP 2111.01. When the broadest reasonable interpretation of a claim covers a signal *per se*, the claim must be rejected under 35 U.S.C. § 101 as covering non-statutory subject matter. *See In re Nuijten*, 500 F.3d 1346, 1356-57 (Fed. Cir. 2007) (transitory embodiments are not directed to statutory subject matter) and *Interim Examination Instructions for Evaluating Subject Matter Eligibility Under 35 U.S.C. § 101*, Aug. 24, 2009; p. 2.

The USPTO recognizes that applicants may have claims directed to computer readable media that cover signals *per se*, which the USPTO must reject under 35 U.S.C. § 101 as covering both non-statutory subject matter and statutory subject matter. In an effort to assist the patent community in overcoming a rejection or potential rejection under 35 U.S.C. § 101 in this situation, the USPTO suggests the following approach. A claim drawn to such computer readable medium that covers both transitory and non-transitory embodiments may be amended to narrow the claim to cover only the statutory embodiments to avoid rejection under 35 U.S.C. 101 by adding the limitation "non-transitory" to the claim. *Cf. Animals - Patentability*, 1077 *Off. Gaz. Pat. Office* 24 (April 21, 1987) (suggesting that applicants add the limitation "non-human" to a claim covering a multi-cellular organism to avoid a rejection under 35 U.S.C. § 101). Such an amendment would typically not raise the issue of new matter, even when the specification is silent because the broadest reasonable interpretation relies on the ordinary and customary meaning that includes signals *per se*. The limited situations in which such an amendment could raise issues of new matter occur, for example, when the specification does not support non-transitory embodiments because a signal *per se* is the only viable embodiment such that the amended claim is impermissibly broadened beyond the supporting disclosure. *See, e.g., Gentry Gallery, Inc. v. Berkline Corp.*, 134 F.3d 1473 (Fed. Cir. 1998).

5. Claim 18 is/are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 18 recites “a computer program product comprising a computer readable medium including a program stored thereon” embodying functional descriptive material. However, the claim does not define the computer readable medium as “non-transitory” and as such currently encompasses transitory propagating signals *per se*. Examiner recommends “a non-transitory computer

Art Unit: 2629

readable storage medium" to comply with current policy regarding Patent Eligibility under 35 U.S.C. § 101. Further, the claimed "computer readable storage medium" is not clearly defined in the specification. Examiner interprets the claimed "program" without "computer readable storage medium" because of the above mentioned USC 112 1st problem. The claimed "program" is not a "process" under 35 U.S.C. 101 because it is not a series of steps. The claimed "program" has no physical structure, does not itself perform any useful, concrete and tangible result and, thus, does not fit within the definition of a machine. The claimed "program" is not matter, but a form of "data structure" or "computer language instructions", and therefore is not a composition of matter. And lastly, because a "programming code" lacks physical substance and is not a residual class of product, a claimed signal does not fall within the definitions of manufacture. Therefore, a claimed signal does not constitute patentable subject matter as set forth in 35 U.S.C. 101. As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

In view of the above cited MPEP section the claims are non-statutory because they are functional descriptive material per se.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 1-15 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Yoshiki* (JP 2003062268) in view of *Yokoi* (US 4,542,903) and *Langlais* (US 5,184,956).

As to **claim 1**, *Yoshiki* (Figs. 2, 4-7 and 14-17) discloses an apparatus comprising:

a display unit with information-indicating light units (gaming machine with lighting units 30 having LEDs 31 around the border of the display screen);

a controller (CPU21) configured to define control commands on the basis of a display unit application and an instantaneous view shown in the display unit (CPU21 determines a pattern of displayed information [0047] in order to inform the CPU12 how to interact with lighting units 30 [0048,0081]); and

a light driver (CPU12 [0048]) configured to control the information-indicating light units (for controlling the plurality of lighting units 30 containing LEDs 31 [0053]) based on the control commands (CPU12 controls the lighting units 30 according to controls sent from CPU21 [0081]), such that the information-indicating light units are arranged to indicate information concerning a display unit application object (lighting units 30 containing LEDs 31 are controlled by CPU12 to light and indicate an interaction of the display information with the lighting units around the edge of the display by synchronizing the emission of light with the display information [0013,0036,0063, 0081, 0084]).

Yoshiki does not expressly disclose wherein the apparatus is a portable apparatus.

Yokoi discloses a portable gaming device (abstract; Figs. 1, 2, 3, 8, 20-21).

At the time of invention, it would have been obvious for a person of ordinary skill in the art to have provided a portable version of and/or increased the portability of the gaming device as taught by *Yokoi* in the gaming device of *Yoshiki*. The suggestion/motivation would have been to provide a gaming device that is as compact as possible [col. 1, lines 10-16 and lines 25-26].

Yoshiki in view of *Yokoi* does not explicitly disclose the indication of objects located only outside the current view of the display.

Langlais (Figs. 2A, 2B, 4, and 5) discloses a gaming system with an external indicator to indicate objects located only outside the current view of the display (rearview mirrors 20, 25, and 26 only display objects which the user has passed and are no longer located in the current view of display screen 18 since display 18 displays game information ahead or in front of the user while the rearview mirrors display objects behind the user).

At the time of invention, it would have been obvious for a person of ordinary skill in the art to have provided an indication of objects that are not currently in display screen as taught by *Langlais* in the gaming device of *Yoshiki* as modified by *Yokoi*. The suggestion/motivation would have been to maintain the user's complete awareness of their surroundings regardless of where they are currently looking.

As to **claim 9**, *Yoshiki* discloses a method comprising:

defining in a controller of a device a control command on the basis of a display unit application and an instantaneous view shown in the display unit in order to control information-indicating light units (controller CPU21 determines commands about display information regarding patterns of current display information in order to light up lighting units 30 so that they interact with the display information [0048,0063,0081]); and

controlling the information-indicating light units, which are located in surroundings of the display unit (lighting units 30 containing LEDs 31 are located in the area surrounding the display 4), through a light driver based on the control command defined in the controller (driver CPU12 controls the lighting units 30 according to signals from controller CPU21 [0048, 0081]), such that information concerning a display unit application object of the display unit is indicated by means of the information-indicating light units (lighting units 30 containing LEDs 31 are controlled by CPU12 to light and indicate an interaction of the display information with the lighting units around the edge of the display by synchronizing the emission of light with the display information [0013,0036,0063, 0081, 0084]).

Yoshiki does not expressly disclose the device as being portable.

Yokoi discloses a portable gaming device (abstract; Figs. 1, 2, 3, 8, 20-21).

At the time of invention, it would have been obvious for a person of ordinary skill in the art to have provided a portable version of and/or increased the portability of the gaming device as taught by *Yokoi* in the gaming device of

Yoshiki. The suggestion/motivation would have been to provide a gaming device that is as compact as possible [col. 1, lines 10-16 and lines 25-26].

Yoshiki in view of *Yokoi* does not expressly disclose the indication of objects located only outside the current view of the display.

Langlais (Figs. 2A, 2B, 4, and 5) discloses a gaming system with an external indicator to indicate objects located only outside the current view of the display (rearview mirrors 20, 25, and 26 only display objects which the user has passed and are no longer located in the current view of display screen 18 since display 18 displays game information ahead or in front of the user while the rearview mirrors display objects behind the user).

At the time of invention, it would have been obvious for a person of ordinary skill in the art to have provided an indication of objects that are not currently in display screen as taught by *Langlais* in the gaming device of *Yoshiki* as modified by *Yokoi*. The suggestion/motivation would have been to maintain the user's complete awareness of their surroundings regardless of where they are currently looking.

As to **claim 18**, *Yoshiki* discloses a computer program product comprising a computer readable storage medium including a program stored thereon, comprising software readable by a data processing device (program ROM13 contains the control program for detecting the variations by controller CPU21 and light driver CPU12 [0059]) for performing actions for improving information display capability of a display unit of a device (lights 30 light up providing

Art Unit: 2629

additional indication to the user regarding display information thereby improving the ability of the display to express information), the actions comprising:

defining a controllable light unit group composed of light units arranged in the surroundings of the display unit (light units 30 containing LEDs 31 are arranged along all four sides of the display 4) on the basis of a display application and an instantaneous view shown in the display unit (CPU21 determines a pattern of displayed information [0047] in order to inform the CPU12 how to interact with lighting units 30 [0048,0081]);

generating on the basis of the display unit application of the display unit, certain control commands in order to control a defined light unit group according to the display unit application, the instantaneous view of the display unit and a display unit application object (CPU12 generates control commands for the light units based on commands received from CPU21 about display information regarding patterns of current display information and then uses those signals to drive the groups of lighting units 30 [0048,0063,0081]), and;

transmitting the generated control commands to a light driver in order to control the defined light unit group for giving information about the display unit application object (CPU12 generates and drives groups of light units 30 containing LEDs 31 that surround display screen 4 according to commands sent by CPU12 determined by CPU21 according to a detected patterns in order to indicate display information to the user such as object interaction [0053, 0055, 0057, 0081]).

Yoshiki does not expressly disclose the device as being portable.

Yokoi discloses a portable gaming device (abstract; Figs. 1, 2, 3, 8, 20-21).

At the time of invention, it would have been obvious for a person of ordinary skill in the art to have provided a portable version of and/or increased the portability of the gaming device as taught by *Yokoi* in the gaming device of *Yoshiki*. The suggestion/motivation would have been to provide a gaming device that is as compact as possible [col. 1, lines 10-16 and lines 25-26].

Yoshiki in view of *Yokoi* does not expressly disclose the indication of objects located only outside the current view of the display.

Langlais (Figs. 2A, 2B, 4, and 5) discloses a gaming system with an external indicator to indicate objects located only outside the current view of the display (rearview mirrors 20, 25, and 26 only display objects which the user has passed and are no longer located in the current view of display screen 18 since display 18 displays game information ahead or in front of the user while the rearview mirrors display objects behind the user).

At the time of invention, it would have been obvious for a person of ordinary skill in the art to have provided an indication of objects that are not currently in display screen as taught by *Langlais* in the gaming device of *Yoshiki* as modified by *Yokoi*. The suggestion/motivation would have been to maintain the user's complete awareness of their surroundings regardless of where they are currently looking.

As to **claim 19**, *Yoshiki* discloses an apparatus for improving information display capability of a display unit of a device (lights 30 light up providing additional indication to the user regarding display information thereby improving the ability of the display to express information), the apparatus comprising:

means for defining a controllable light unit group on the basis of information of a display unit application shown in the display unit and the display application object (CPU21 determines a pattern of displayed information [0047] in order to inform the CPU12 how to interact with lighting units 30 [0048,0081]), and;

means for generating certain control commands on the basis of the information of the display application of the display unit and the display application object in order to control a given light unit group for giving information about the display unit application object (CPU12 generates control commands for the light units based on commands received from CPU21 about display information regarding patterns of current display information and then uses those signals to drive the groups of lighting units 30 indicating display object interaction [0048,0063,0081]).

Yoshiki does not expressly disclose the device as being portable.

Yokoi discloses a portable gaming device (abstract; Figs. 1, 2, 3, 8, 20-21).

At the time of invention, it would have been obvious for a person of ordinary skill in the art to have provided a portable version of and/or increased

Art Unit: 2629

the portability of the gaming device as taught by *Yokoi* in the gaming device of *Yoshiki*. The suggestion/motivation would have been to provide a gaming device that is as compact as possible [col. 1, lines 10-16 and lines 25-26].

Yoshiki in view of *Yokoi* does not expressly disclose the indication of objects located only outside the current view of the display.

Langlais (Figs. 2A, 2B, 4, and 5) discloses a gaming system with an external indicator to indicate objects located only outside the current view of the display (rearview mirrors 20, 25, and 26 only display objects which the user has passed and are no longer located in the current view of display screen 18 since display 18 displays game information ahead or in front of the user while the rearview mirrors display objects behind the user).

At the time of invention, it would have been obvious for a person of ordinary skill in the art to have provided an indication of objects that are not currently in display screen as taught by *Langlais* in the gaming device of *Yoshiki* as modified by *Yokoi*. The suggestion/motivation would have been to maintain the user's complete awareness of their surroundings regardless of where they are currently looking.

As to **claim 2**, *Yoshiki* discloses a controller (CPU12) for generating control commands for the light units on the basis of the information transmitted by a display driver, to the light driver (CPU12 generates control commands for the light units based on commands received from CPU21 about display

Art Unit: 2629

information regarding patterns of current display information and then uses those signals to drive the lighting units 30 [0048,0063,0081]).

As to **claim 3**, *Yoshiki* (Figs. 2, 4-7 and 14-17) discloses wherein in the surroundings of the display unit, there are at least two light units or light unit groups formed of single light units (multiple light units 30 containing LEDs 31 surround display screen 4 and can be controlled individually or in groups depending on the commands sent by CPU12 according to a pattern determined by CPU21 [0053, 0055, 0057, 0081]), placed so that the light units are arranged at an angle of 90 degrees with respect to each other (light units 30 containing LEDs 31 are arranged along all four sides of the display 4, thus each side is rotated 90 degrees from an adjacent side).

As to **claim 4**, *Yoshiki* (Figs. 4-7 and 14-17) discloses wherein the light units are placed around the display unit (light units 30 containing LEDs 31 are arranged along all four sides of the display 4).

As to **claim 5**, *Yoshiki* discloses the light driver (CPU12 [0048]) configured to control the light units or the light unit groups formed of single light units (driver controls multiple light units 30 containing LEDs 31 that surround display screen 4 and can be controlled individually or in groups depending on the commands sent by CPU12 according to a pattern determined by CPU21 [0053, 0055, 0057, 0081]).

As to **claim 6**, *Yoshiki* (Figs. 2, 4-7 and 14-17) discloses the controller and the light driver configured to control the light units according to the application

Art Unit: 2629

shown in the display unit (emission of lighting units 30 is controlled by the light driver CPU12 according to driving signals, determined according to recognized patterns by CPU21, in order to synchronize the emission of light with the display information [0013,0036,0063, 0081, 0084]).

As to **claim 7**, *Yoshiki* discloses the controller configured to define the control commands of the light units to synchronize the light units with respect to the view (emission of lighting units 30 is controlled by the light driver CPU12 according to driving signals, determined according to recognized patterns by CPU21, in order to synchronize the emission of light with the display information [0013,0036,0063, 0081, 0084]).

As to **claim 8**, *Yoshiki* discloses the light driver configured to control the functions and properties of the light units according to the control commands generated by the controller (light driver CPU12 controls the driving of lighting units 30 based on signals from controller CPU21 [0048,0081]).

As to **claim 10**, *Yoshiki* discloses in the controller, there are generated functional commands to a light driver (emission of lighting units 30 is controlled by the light driver CPU12 according to driving signals, determined according to recognized patterns by controller CPU21 [0013,0036,0063, 0081, 0084]) in order to control the light units on the basis of the information of the view in the display unit (order to synchronize the emission of light with the display information [0013,0036,0063, 0081, 0084]), transmitted by a display driver and the application of the display unit (the functional commands are transmitted by

Art Unit: 2629

display driving controller CPU21 based on patterns recognized in the current application of the display unit).

As to **claim 11**, *Yoshiki* (Figs. 2, 4-7 and 14-17) discloses that the light units are arranged in the surroundings of the display unit (light units 30 containing LEDs 31 are arranged along all four sides of the display 4), at an angle of 90 degrees with respect to each other (light units 30 containing LEDs 31 are arranged along all four sides of the display 4, thus each side is rotated 90 degrees from an adjacent side), in order to indicate the direction, with respect to the view shown in the display unit, by the light units (lighting units 30 according to interactions from displayed objects and the directions in which they interact with the edge of the display where the lighting units are located; see the figure showing shooting at the edge of the screen and the man jumping where the lighting units indicate the direction of interaction).

As to **claim 12**, *Yoshiki* discloses that the light units are arranged in light unit groups, which are separately controlled by the light driver (multiple light units 30 containing LEDs 31 that surround display screen 4 can be controlled individually or in groups depending on the commands sent by CPU12 according to a pattern determined by CPU21 [0053, 0055, 0057, 0081]).

As to **claim 13**, *Yoshiki* discloses that in the display unit, there are shown objects under observation (characters in Figs. 4-7 and 14-17 [0036, 0089]), and simultaneously the light units controlled by the light driver are used for generating information in the view of the display (emission of lighting units 30 is controlled by

Art Unit: 2629

the light driver CPU12 according to driving signals, determined according to recognized patterns by CPU21, in order to synchronize the emission of light with the display information [0013,0036,0063, 0081, 0084]).

As to **claim 14**, *Yoshiki* (Figs. 4-7 and 14-17) discloses that the approaching of an object located inside the view of the display unit to the area of the view shown outside the display unit is indicated by generating in the light driver a sense stimulus by the light units that are located in the same direction with respect to the view as the display unit application object in question (characters within the display attempt to interact with an area outside the display screen 4 and lighting units 30 at the location of the attempted interaction light up indicating the direction of movement).

Langlais (Figs. 2A, 2B, 4, and 5) discloses a gaming system with an external indicator to indicate the direction of approaching objects located outside the current view of the display that are approaching an area inside the current view of the display (rearview mirrors 20, 25, and 26 display objects which the user has passed and that are approaching from behind which are not in the current view of display screen 18 since display 18 displays game information ahead or in front of the user while the rearview mirrors display objects behind the user).

As to **claim 15**, *Yoshiki* (Figs. 4-7 and 14-17) discloses that the light driver is used for controlling a controllable light unit group (multiple light units 30 containing LEDs 31 surround display screen 4 and can be controlled individually

Art Unit: 2629

or in groups depending on the commands sent by CPU12 according to a pattern determined by CPU21 [0053, 0055, 0057, 0081]), located in a given direction with respect to the view of the display unit (light groups are controlled according to the direction of interaction with the edge of the display [0089-0092]), so that the intensity of the light units is increased as the display unit application object approaches the display unit (lighting units 30 change from off to on when the object interacts with the edge).

8. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Yoshiki* (JP 2003062268) in view of *Yokoi* (US 4,542,903), *Langlais* (US 5,184,956), and *Kawai* (US 20040229691).

Yoshiki discloses that the threatening factors of a game application represented in the view are indicated by adjusting the controllable light unit group that is located in the direction of the threatening factor with respect to the view by the light driver by emitting a given wavelength of light (controllable light units 30 are activated in Fig. 14 on the edge in the direction of the game threatening factors (bullets) emitting light of a certain wavelength (color)), and that the controllable light groups are arranged in multiple wavelengths (different colors around the edge [0053]).

Yoshiki in view of *Yokoi* and *Langlais* does not expressly disclose indicating possible proceeding directions in the direction to proceed.

Kawai discloses an electronic game indicating possible proceeding directions to the user in the direction to proceed (Figs. 5-28; [0102,0110])

Art Unit: 2629

At the time of invention, it would have been obvious for a person of ordinary skill in the art to have indicated the direction to proceed to the user as taught by *Kawai* in the gaming device of *Yoshiki* as modified by *Yokoi* and *Langlais*. The suggestion/motivation would have been to increase the pleasure of the game by increasing user's chance of survival.

9. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Yoshiki* (JP 2003062268) in view of *Yokoi* (US 4,542,903), *Langlais* (US 5,184,956), and *Hayashida* (US 6,409,596).

Yoshiki (Figs. 4-7 and 14-17) discloses that in the display application shown in the view, the display objects interaction activates the controllable light unit group located in the direction of interaction by the light driver in a given way defined in the application (driver CPU12 controls lighting units 30 [0048,0081] according to interactions from displayed objects and the directions in which they interact with the edge of the display where the lighting units are located; see the figure shooting at the edge of the screen and the man jumping where the lighting units indicate the direction of interaction).

Yoshiki in view of *Yokoi* and *Langlais* does not expressly disclose indicating the direction of a searched target located outside the current view.

Hayashida discloses an electronic game with an indicator indicating the direction of a searched target located outside the current view (a radar screen 65 is a supplementary screen indicating a search of opponents surrounding the user

Art Unit: 2629

and indicating their location including opponents located behind the user outside of the current view ahead of the user; Figs. 6 and 9).

At the time of invention, it would have been obvious for a person of ordinary skill in the art to have indicated the direction of a searched target located outside the current view taught by *Hayashida* in the gaming device of *Yoshiki* as modified by *Yokoi* and *Langlais*. The suggestion/motivation would have been to provide the user with information about an approaching opponent preventing surprise.

Response to Arguments

10. Applicant's arguments filed 4 January 2010 have been fully considered but they are not persuasive.

a. With respect to claims 1-15 and 18-19, Applicant submitted that *Yoshiki* "necessitates that the game cannot be portable". Examiner respectfully disagrees. *Yoshiki* (Figs. 4-7 and 14-16) teaches a visual gaming machine with lighting units 30 having a controller to control LEDs 31 around the border of the display screen increasing stimuli supplied to the user. *Yoshiki* NEVER discloses that the gaming machine cannot be portable nor imply that such as true. Thus, in view of the portable gaming device of *Yokoi* (abstract; Figs. 1, 2, 3, 8, 20-21), it would have been clear to one of ordinary skill to reduce the size of the display and proportionally the lighting units as shown in Fig. 14 of *Yoshiki* to that of a portable size such as *Yokoi* thus providing a very compact portable solution [col.

Art Unit: 2629

1, lines 10-16 and lines 25-26] to maximize the amount of time and ease of use thus maximizing user enjoyment.

b. With respect to claims 1-15 and 18-19, Applicant further submits that *Yoshiki* in view of *Yokoi* and *Langlais* does not disclose "indication of information concerning a display unit application located only outside a current view of the display unit". Examiner respectfully disagrees. As previously cited, *Yoshiki* (Figs. 14-16) teaches a gaming machine with lighting units surrounding the display which interact with application objects located within the display (items/figures on the screen are able to interact with lighting units around the screen). *Langlais* (Figs. 2A, 2B, 4, and 5) discloses a gaming system with an external indicator (lighting units of the rearview mirror displays) to indicate objects located only outside the current view of the display (rearview mirrors 20, 25, and 26 only display objects which the user has passed and are no longer located in the current view of display screen 18 since display 18 displays game information ahead or in front of the user while the rearview mirrors display objects behind the user. Further, the rearview display acts to view opponents and/or objects approaching from behind which again is outside the current forward view) in order to maintain the user's complete awareness of their surroundings regardless of where they are currently looking. Further, it should be noted that *Yoshiki* also "indicates information concerning display unit objects located only outside a current view of the display unit" (the lighting units 31 surrounding *Yoshiki* light up (Figs. 14-16) thus indicating information concerning their (the light unit's) position

Art Unit: 2629

wherein the light units themselves are located outside the current video display region 4).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- a. *Nagata* (US 6,325,715) and *Kerr* (US 2004/0137983) both disclose portable gaming systems with information indicating light units arranged to indicate information concerning a display unit application object located only outside a current view of the display unit.
- b. *Paulsen* (US 2005/0153768) discloses that the large gaming machine can be played remotely on a portable gaming device such as a wireless game player.

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2629

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M. Stone whose telephone number is (571)270-5310. The examiner can normally be reached on Monday-Friday 9 A.M. - 4:30 P.M. E.S.T. (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh D. Nguyen can be reached on (571)272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert M Stone/
Examiner, Art Unit 2629

/Chanh Nguyen/
Supervisory Patent Examiner, Art
Unit 2629